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A recent study found a lack of homogeneity among supervisors with respect to their role performance despite a similarity with respect to role expectation. To develop an accurate descriptive model of the supervisory process, data were collected describing both the activities of supervisors and their perception of the purpose of supervision. Completed survey instruments were received from 373 county-level supervisors in Florida containing: (1) An open-ended item requesting the supervisor's opinion as to the purpose of supervision, and (2) 22 items on the frequency with which supervisors engage in various role activities. The open-ended statements were sorted into three levels of role definition with seven categories: (1) Broad objective (instructional improvement), (2) method of functioning (assistance, coordination, and leadership), and (3) role involvement (curriculum development, inservice education, and human relations-communications). An attempt was made to place the 22 frequency items into the six categories of the second and third levels. Factor analysis revealed that overlap prevents identification of the six categories as separate and distinct. A revised model of three dimensions (assistance in curricular development, leadership/communication, and inservice education) provides elements descriptive of the supervisory process. (HW)

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THE RELATIONSHIP BETWEEN SUPERVISOR'S ACTIVITIES AND
THEIR PERCEPTION OF THE PURPOSE OF SUPERVISION*

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The purpose of this paper is to suggest a model of the structural levels of the supervisory process based on: (1) a logical classification of what actual supervisors perceive to be the purpose of supervision, and (2) empirical data relative to the activities and responsibilities of practicing supervisors. Prerequisite to development and improvement of supervisory personnel in both preservice and inservice training is a thorough understanding of the activities and needs of the actual supervisor. This understanding begins with a concise and realistic description of the existing supervisory process.

Establishing a frame-of-reference for this description necessitates the delineation and definition of the structural dimensions of this specific domain. Just as the investigation into the domain of individual personality demanded an adequate structural mapping of that domain, so then, must an adequate structural model be developed for the supervisory process.

In the recent study, of which this paper is a part, a major finding was the apparent lack of homogeneity with respect to supervisory role performance, despite the remarkable similarity with respect to role expectation. In other words, the supervisory personnel surveyed, either by reason of their training or job descriptions, could agree, pretty much, on those activities that supervisors ought to perform. Yet, when it came to describing the activities in which they were actually engaged, the diversity was unmistakable.

These findings suggest that quite different results might be obtained if one were to base a descriptive frame of reference on role expectations rather than role performance. Thus, with two possible perspectives from which we might view the supervisory process, the problem is to determine which approach provides greater relevance and operationally valid descriptive dimensions.

Description involves a two step procedure which I will call the survey-status method. The survey involves determining the relevant variables; those variables of interest for which observations will be made. An operationally valid descriptive variable is one that accounts for a maximum amount of variance among a population to be described. Status involves determining the present position of a population or subpopulation with respect to the above defined variables.

It is my contention that for a model to be maximally useful for describing the supervisory process, it should encompass the common or overlapping dimensions of both role performance and role expectations. Thus the dimensions of the model of the supervisory process would be defined by variables which are relevant to the supervisor's perception of the purpose of supervision and at the same time be operationally valid descriptors of actual supervisor behavior.

With these considerations in mind, it was decided to determine if a descriptive model of the structure of the supervisory process could be generated from data describing the activities of practicing supervisors and their perception of the purpose of supervision.

Method

The Florida Educational Directory contains the classification "Professional

Supervisory Personnel"; all those individuals listed in the 1967 Directory, who were classified in this manner, with the exception of maintenance and transportation personnel, constituted the population for this study. There were 599 supervisors so listed and all of these were mailed copies of the survey instrument. There were 389 instruments completed and returned; however 16 of these were received after the cut-off date and were not included in the analysis. Thus, 373 county level supervisors composed the sample for which data were available; this represents 62.27% of the population of Florida supervisors.

The survey instrument, from which data relative to this paper were drawn, consisted of twenty-eight pages divided into four main parts. Briefly, these parts were: (1) the purpose of supervision; (2) situational information; (3) the supervisory process; and (4) local supervisor-state department relationship. The sections of the instrument relevant to this paper were: (1) an open-ended item asking the supervisor to "state as briefly as possible what you believe to be the purpose of supervision"; and (2) a set of 22 items concerned with the frequency with which supervisors engage in various role activities. These items required responses to a five point scale with the instructions that the respondent indicate the frequency (1 = Never, 5 = Frequently) which he engaged in that activity.

RESULTS

Purpose of Supervision

From the 373 supervisors included in analyses of the data, there were 289 who responded to the open-ended item that required a written response. A total of 411 statement responses constituted the data for this part of the study. There was a great deal of overlap among the ideas expressed, and

it seemed possible to classify the 411 responses into a relatively small number of categories. Such a classification scheme would facilitate the interpretation of the written responses, and provide a more concise and realistic picture of what actual supervisors feel is their professional objective.

A classification system² was developed that seemed to allow a maximum number of responses to be classified. This system consisted of seven categories into which all but fourteen responses were classified. Table 1 presents the categories together with the number and percentage of responses classified into each category.³

It is apparent that the interrelations among these categories are complex. When asked to state the purpose of supervision, the respondents answered according to their own conception of what constitutes a purpose. It is convenient to think of the seven categories as occupying three basic levels of role definition. At one level there appears the broad objective or goal; the second level involves the "means to the end" or the manner or method of functioning. The third level involves specific areas of role involvement. Figure 1 illustrates these relationships.

²Acknowledgement and appreciation is expressed to Edith Miller for her efforts in devising the categories and classifying the responses.

³For examples of the kinds of responses classified into these categories, reference is made to the complete Regional Curriculum Project report cited in the references.

Instructional Improvement is the ultimate objective or goal not only of supervision but education in general. The methods by which supervisors accomplish this goal are through Assistance, Coordination, and Leadership. The specific areas in which supervisors are involved are primarily those of Curriculum Development, In-Service Education and Human Relations-Communication.

In order to determine whether or not these seven categories could also be used to reliably classify the 22 items from the activities scale, and to facilitate later interpretations of the factor analysis, this writer and another researcher familiar with the project independently performed such a classification.

This a priori classification of the 22 items was confined to the six categories of the lower two levels (see Fig. 1). It was hypothesized that if these six categories constituted valid elements of a model of the supervisory process, then their counterparts could be found among the empirical factors underlying the 22 specific behavioral activities of the supervisors.

Factor Analyses of the Activities Scale

Responses to the 22 item activities scale were intercorrelated by the product moment method, and unities were employed throughout the principal diagonal of the correlation matrix. This matrix was then factor analyzed by the principal axis method. From this point two separate procedures were employed to determine the number of factors to retain for rotation. First, it was decided that if there was an exact correspondence between the six structural categories and the empirical factors underlying the activities, then the expected number of factors would be six, and these would rotate to an acceptable simple structure and readily interpretable factors. Second, if this hypothesized structure did not fit the data, then the number of factors and subsequent search for simple structure should be made "blindly", that is

without thought to an hypothesized number of factors. In other words, this procedure centered around first securing a set of psychologically interpretable factors and then noting their correspondence, if any, to the structural categories.

The blind analysis began by examining the eigenvalues from the principal axis solution. Five eigenvalues satisfied the Kaiser-Guttman criterion of roots greater than one (Kaiser, 1960); but in cases where factoring occurs at the item level with variables of low communality, this criterion will frequently give too large an estimate of the number of factors. It can however be considered an upper bound for the number of factors under these circumstances. Another criterion, Cattell's Scree Test, (Cattell, 1966) involves examining the plot of eigenvalues for breaks in the curve. For these data, a large break occurred after three factors and a second break occurred after seven factors.

Since five had been established as an upper bound by the Kaiser-Guttman rule, three factors were considered appropriate by the Scree Test criterion. Thus the following rotational solutions were tried: (1) A three factor solution and (2) a six factor solution. All rotations were performed to secure maximum simple structure by the maximum hyperplane count criterion (Cattell and Muerle, 1960), thus the factors were free to go oblique if such a condition was required. These rotations were accomplished by the Maxplane procedure (Eber, 1966; Rentz, 1968).

The Six Factor Solution

Oblique rotations of six factors failed to produce an acceptable fit to the hypothesized six factor solution based on how the items had been clustered a priori. Three of the four assistance items loaded the same factor as the four curriculum development items. Two of the four human

relations items also loaded this factor, together with one of the two co-ordination items. This largest of the six factors was thus represented in items from four of the a priori clusters.

The three leadership items were spread over three factors. The in-service education items split, two each loading two factors and one item loading another factor. Such a situation obviously did not support the contention of six substantive influences, or factors, underlying the 22 items. This was not surprising since the "blind" analysis had indicated five factors to be an upper bound.

The Three Factor Solution

Table 2 presents the rotated factor pattern coefficients for the oblique, three factor solution. The code letters in parentheses identify the a priori classification of each item.

Factor I was called Assistance in Curriculum Development. This factor loaded all items from the curriculum development category and all but one of the assistance items. Items loading Factor I reflect a direct involvement in curriculum and the instructional process. However, this involvement appears to be implimented through an assistance mode rather than a leadership mode.

Factor II seemed to represent a Leadership/Communication role dimension which is more administratively oriented and much further removed from a direct involvement in the instructional process. Items loading this factor reflect activities associated with extra-school relationships; that is, the school's involvement in federal projects and community relations.

Factor III involves Inservice Education. All the items classified in this category were represented in Factor III. Thus this particular area of involvement seems to be an important dimension of a supervisor's role per-

formance that is relatively independent of involvement in curriculum development or extra-school relationships.

CONCLUSIONS

From the results of the analyses it is possible to modify the conceptual model represented in Figure 1. This model was generated on the basis of responses relative to the purposes of supervision, or role expectations. The factor analyses suggest that in terms of actual role activities the categories overlap to the extent that it is not possible to identify the six categories as separate and distinct. The three empirical factors can be considered meaningful descriptive dimensions of the supervisory process. In essence, they are a combination of the six elements of the structural levels model and can be considered more in line with actual role performance. In other words, a revised model consisting of three dimensions could provide the elements descriptive of the supervisory process. Both preservice and inservice training of supervisory personnel may be facilitated by focusing on changing or improving existing practices, especially since these existing activities are predicated on a real need at the local school level. Further, it is probably possible to construct a profile of the various types of supervisory personnel needed, based on various combinations of the three elements of the revised structural model.

GOAL		Instructional Improvement	
METHODS	Provision of Assistance	Coordination of Efforts	Provision of Leadership
AREAS OF INVOLVEMENT	Curriculum Development	In-Service Education	Human Relations-Communication

Figure 1. Structural Levels of the Supervisory Process

TABLE 1

NUMBER AND PERCENTAGE OF WRITTEN RESPONSES
CLASSIFIED INTO EACH CATEGORY

<u>Category</u>	<u>Responses</u>	
	<u>Number</u>	<u>Percent</u>
Provision of Assistance	120	29.2
Instructional Improvement	105	25.5
Provision of Leadership	43	10.5
Curriculum Development	38	9.2
Coordination of Efforts	33	8.0
In-Service Education	32	7.8
Human Relations-Communication	26	6.3
Unclassified	14	3.4
Total Responses	411	99.9

TABLE 2

ROTATED FACTOR PATTERN COEFFICIENTS FOR THE
TWENTY-TWO ITEM ACTIVITIES SCALE

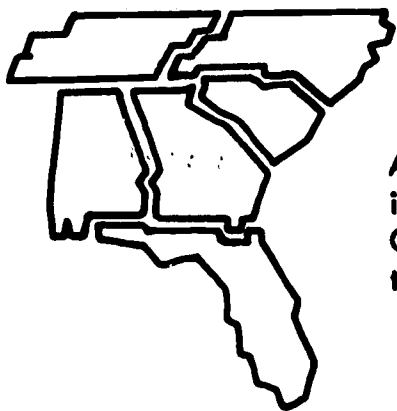
<u>Item</u>		<u>Loadings</u>		
		<u>I</u>	<u>II</u>	<u>III</u>
Assist textbook selection committee	(A)	91		
Collect and disseminate current curriculum materials	(CD)	89		
Assist in the development of curriculum guides and other publications	(CD)	84		
Develop curricular designs and coordinate curriculum improvement efforts	(CD)	81		
Assist in the orientation of new and beginning teachers	(A)	77		
Coordinate instructional programs	(C)	73		
Hold individual conferences with teachers	(HR)	73	-36	
Develop and prepare new instructional media	(L)	71		
Assist teachers in the location, selection, and interpretation of materials	(A)	69	-30	35
Visit and observe in the classroom	(HR)	68	-38	
Assist in the development of programs for federal funding	(A)	33	78	-51
Participate in the formulation of policy	(L)		70	
Work with citizens or lay groups	(HR)		67	
Engage in public relations	(HR)		65	
Routine administrative duties	(C)		62	
Assist in the evaluation and appraisal of school programs	(L)		44	
Teach demonstration lessons	(IS)		-63	84
Arrange inter-system visitations to observe promising practices	(IS)			77

TABLE 2 (cont.)

<u>Item</u>	<u>Loadings</u>		
	<u>I</u>	<u>II</u>	<u>III</u>
Participate in in-service educational programs and workshops (IS)			73
Arrange intra-system visitations to observe promising practices (IS)			69
Plan and arrange in-service education programs and workshops (IS)			67
Conduct research and evaluation studies related to your area of responsibility (L)			51

REFERENCES

- Cattell, R. B. "The Scree Test for the Number of Factors." Multivariate Behavioral Research, April, 1966, Vol. 1, pp. 245-276.
- Cattell, R. B., and J. L. Muerle. "The 'MAXPLANE' program for factor rotation to oblique simple structure." Educational and Psychological Measurement, 1960, 20, pp. 569-590.
- Eber, H. W. "Toward Oblique Simple Structure: Maxplane." Multivariate Behavioral Research, January, 1966, pp. 112-125.
- Kaiser, H. T. "The Application of Electronic Computers to Factor Analysis." Educational and Psychological Measurement, 1960, 20, pp. 141-151.
- Regional Curriculum Project: Joint Study. The County Level Supervisor in Florida: A Role Study. State Department of Education, Tallahassee, Florida, December, 1968.
- Rentz, R. R. "Maxplane: A Computer Program for Oblique Factor Rotations," Users Manual. College of Education, University of Georgia, 1968. (Mimeo.)



A Cooperative Program for the Study of Instructional Leadership Involving Experimentation in Determining the Role or Roles of State Departments of Education in Facilitating Desirable Change in the Educational Program for Children and Youth. (A Project under Title V, Section 505, Public Law 89-10, Elementary and Secondary Education Act of 1965.)